IN THE CLAIMS:

1 - 16 (Cancelled)

17 (New) A router for guiding a plurality of conductors, the router including:

a routing unit having first and second surfaces and formed with a plurality of contiguous open-ended hollow paths, the open-ended hollow paths being directed in a free-form manner from the first surface through the routing unit to the second surface and adapted for receiving the plurality of conductors, the routing unit constructed in accordance with a three dimensional fabrication process including the steps

incrementally forming a portion of the router; and

iterating the incrementally forming step until the router is complete.

18. (New) A router according to claim 17 wherein the incrementally forming step comprises a three-dimensional additive technique.

19. (New) A router according to claim 17 wherein the incrementally forming step comprises a three-dimensional subtractive technique.

20. (New) A router according to claim 17 wherein the routing unit comprises a block of dielectric material.

21. (New) A router according to claim 17 wherein the routing unit comprises a block of thermally conductive material.

22. (New) A hybrid conductor/board comprising:

a routing unit having first and second surfaces and formed with a plurality of contiguous open-ended hollow paths, the open-ended hollow paths being directed in a free-form manner from the first surface through the routing unit to the second surface, the routing unit constructed in accordance with a process including the steps

incrementally forming a portion of the router; and

iterating the incrementally forming step until the router is complete; the hybrid conductor/board further including

a plurality of conductors routed through the contiguous open-ended hollow paths.

23. (New) A hybrid conductor/board according to claim 22 wherein at least one of the plurality of conductors comprises an electrical conductor.

24. (New) A hybrid conductor/board according to claim 22 wherein at least one of the plurality of conductors comprises an optical conductor.

25. (New) A hybrid conductor/board according to claim 22 wherein at least one of the plurality of conductors comprises a fluid conductor.

26. (New) A hybrid conductor/board according to claim 22 wherein the incrementally forming step comprises a three-dimensional additive technique.

27. (New) A hybrid conductor/board according to claim 22 wherein the incrementally forming step comprises a three-dimensional subtractive technique.

28. (New) A hybrid conductor/board according to claim 22 wherein:

the routing unit first and second surfaces comprise oppositely disposed planar surfaces; and

the plurality of conductors extend from one planar surface to the other planar surface, and include respective opposite ends terminated on each of the respective planar surfaces to form respective first and second contact arrays.

29. (New) A hybrid conductor/board according to claim 28 wherein:

the first contact array has a contact-to-contact spacing substantially greater than that of the second contact array.

30. (New) An automatic test equipment interface for funneling signal conductors from a plurality of pin electronics boards to one or more devices-under-test, the interface including:

a hybrid conductor/board comprising:

a routing unit having first and second surfaces and formed with a plurality of contiguous open-ended hollow paths, the open-ended hollow paths being directed in a free-form manner from the first surface through the routing unit to the second surface,

a plurality of conductors routed through the contiguous open-ended hollow paths; and

a device interface board for coupling to the hybrid conductor/board and adapted to connect to the one or more devices-under-test.

31. (New) An automatic test equipment interface according to claim 30 wherein the plurality of conductors are of equal length.

32. (New) Automatic test equipment for testing one or more devices-under-test, the automatic test equipment including:

a computer workstation; and

a testhead coupled to the computer workstation and including

a plurality of pin electronics boards, and

an interface for funneling signal conductors from the pin electronics boards to the one or more devices-under-test, the interface including

a hybrid conductor/board comprising:

a routing unit having first and second surfaces and formed with a plurality of contiguous open-ended hollow paths, the open-ended hollow paths being directed in a free-form manner from the first surface through the routing unit to the second surface,

a plurality of conductors routed through the contiguous open-ended hollow paths; and

a device interface board for coupling to the hybrid conductor/board and adapted to connect to the one or more devices-under-test.